

REMARKS

The Official Action mailed October 25, 2004, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for One Month Extension of Time*, which extends the shortened statutory period for response to February 25, 2005. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statement filed on August 11, 2004.

Claims 31-33, 35-44, 46-53 and 55-58 were pending in the present application prior to the above amendment. (It is noted that the Office Action Summary shows that claim 54 is pending and withdrawn; however, claim 54 was canceled in an *Amendment* filed August 4, 2004.) Claims 33 and 44 have been canceled, and claims 31, 32, 35-43, 46-53, 55 and 56 have been amended to better recite the features of the present invention. Accordingly, claims 31, 32, 35-43, 46-53 and 55-58 are now pending in the present application, of which claims 31 and 43 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

The Applicant has corrected minor typographical errors, which were mistakenly introduced into the specification in the paragraph beginning at page 31, line 4, in the *Amendment* filed January 25, 2002.

Paragraphs 2-10 of the Office Action reject claims 31-33, 35-44, 46-53 and 55-58 as obvious based on the combination of U.S. Patent No. 6,169,593 to Kanaya et al., U.S. Patent No. 5,636,329 to Sukegawa et al., or U.S. Patent No. 5,608,559 to Inada et al. with JP 9-251996 to Yamazaki et al. The Official Action also relies on U.S. Patent No. 5,821,159 to Ukita, U.S. Patent No. 6,215,077 to Utsumi et al. and JP 8-234212 to Hioki to allegedly teach the features of some of the dependent claims of the present invention. The Applicants respectfully submit that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims, as amended. Independent claims 31 and 43 have been amended to recite the following features: an insulating film being in contact with a side edge of a metallic film; and that a metallic film comprises a same material as that of a source wiring. These features are definitely supported in the specification and drawings. For example, the former feature is supported in page 32, line 6, and Figures 12A and 12B. Also, the latter feature is supported in page 27, lines 12-13, and Figures 12A and 12B. For the reasons provided below, Kanaya, Sukegawa or Inada and Yamazaki '996, either alone or in combination with one or more of Ukita, Utsumi and Hioki, do not teach or suggest at least the above-referenced features of the present invention.

The Official Action states that Kanaya discloses “a metallic film 22 (gate signal wire; col. 8, lines 25-29) formed over the first substrate 20; and a transparent conductive film (TCF) 28 (source single wire; col. 8, ll. 50-51) over said metallic film 22” (pages 2-3, Paper No. 20041020). It is noted that Kanaya appears to teach that the transparent conductive film 28 is used to form source electrodes and source signal lines and that the metallic film 22 and the transparent conductive film 28 are formed from different materials. Kanaya does not teach or suggest at least that metallic film, i.e. metallic film 22, comprises a same material as that of a source wiring, i.e. TCF 28.

The Official Action states that Sukegawa discloses “a protecting film 3 in contact with a side surface of said metallic film 7” (page 5, Id.). However, Sukegawa does not teach or suggest an insulating film being in contact with a side edge of a metallic film, as these terms are defined by the specification and figures of the present application. For example, Figures 11A and 11B of the present application shows a protection film 174 which protects a side edge of the terminal section 182 of the connection wiring 183. The term “side edge” does not refer to that portion of connection wiring 183 which is in contact with insulating film 139 as shown in the right side of Figure 11B. Compare Figures 11A and 11B of the present application with, for example, Figure 1B of Sukegawa. In Sukegawa the insulating film 3 is not in contact with the side edge of metallic film 7, as “side edge” is used in the present application. Rather, Sukegawa appears to show that the side edge of metallic film 7 is covered with transparent conductive film 8, and not with insulating film 3. Sukegawa does not teach or suggest at least an insulating film, e.g. interlayer insulation film 3, being in contact with a side edge (as defined by the present specification and figures) of a metallic film, e.g. metal wiring 7.

The Official Action states that “Inada discloses ... lamination film formed of the 300-nm thick metal film 29 with overlying 80-nm thick transparent conductive film 30 and anisotropic conductive film 36” (page 7, Id.). However, Inada appears to teach that the Ta film 29 constitutes a TFT gate electrode 302a of the display area 23, and that the

Ti film 40 constitutes a source electrode 307 (column 14, lines 36-39). In other words, Inada appears to teach that the metal film and the source electrode are different materials. Inada does not teach or suggest that a metallic film 29/302a comprises a same material as that of the source wiring 40/307.

Yamazaki '996, Ukita, Utsumi and Hioki do not cure the above-referenced deficiencies in Kanaya, Sukegawa and Inada. Yamazaki '996 is relied upon to allegedly teach contact holes (page 3, Id.), Ukita is relied upon to allegedly teach a laminate of tungsten and its nitride (page 8, Id.), Utsumi is relied upon to allegedly teach forming a transparent conductive film from zinc oxide and compounds of zinc oxide and indium oxide (page 9, Id.), and Hioki is relied upon to allegedly teach column-shaped spacers formed of a material used to form a protection film (page 10, Id.). However, Kanaya, Sukegawa or Inada and Yamazaki '996, either alone or in combination with one or more of Ukita, Utsumi and Hioki do not teach or suggest an insulating film being in contact with a side edge of a metallic film; and that a metallic film comprises a same material as that of a source wiring.

Since Kanaya, Sukegawa or Inada and Yamazaki '996, either alone or in combination with one or more of Ukita, Utsumi and Hioki do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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